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EXAMINER	
CUTLER, ALBERT H	
ART UNIT	PAPER NUMBER
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/810,703	KUROSAWA ET AL.	
	Examiner	Art Unit	
	ALBERT H. CUTLER	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11,13-16,18-21 and 23-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11,13-16,18-21 and 23-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to communication filed on December 22, 2009. Claims 11, 13-16, 18-21 and 23-31 are pending in the application and have been examined by the Examiner.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 20, 2009 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 11, 13-16, 18-21 and 23-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 11, 14-16, 19-21 and 24-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Girgensohn et al. (US 6,807,361).

Consider claim 11, Girgensohn et al. teaches:

A method of generating a plurality of moving picture files, the method comprising:

obtaining moving picture data taken by a camera (Recorded video (i.e. moving picture data) is obtained from a video camera, column 2, lines 15-18.), and information about a control of the camera which is taking the moving picture data (Information about the movement (i.e. control) of the camera is obtained through a motion detection algorithm, column 2, lines 25-49.);

determining a time for dividing the moving picture data, for generating plural moving picture files based on the information about the control of the camera which is taking the moving picture data (A video take is divided into a plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20.);

dividing the moving picture data at the time determined at the determining step and generating a plurality of moving picture files, each including divided moving picture data divided at the dividing step (A video take is divided into a plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20.).

Consider claim 14, and as applied to claim 11 above, Girgensohn et al. teaches:

the information about the control of the camera is information indicating that one of pan, tilt, and zoom of the camera is being processed ("The classes of video detectable by the motion detection algorithm are still, pan, tilt, zoom, and garbage", column 2, lines 25-30.).

Consider claim 15, and as applied to claim 11 above, Girgensohn et al. teaches:

the information about the control of the camera is information relating to a change amount per unit time, and wherein the determining step determines the time for dividing the moving picture data based on timing at which the change amount per unit time exceeds a predetermined change amount per unit time (The information about the control of the camera is camera motion information which is thus related to a change amount per unit time. The moving picture data is divided into garbage clips during fast camera movement (i.e. based on timing at which the change amount per unit time exceeds a predetermined change amount per unit time), column 2, lines 41-42.).

Consider claim 28, and as applied to claim 11 above, Girgensohn et al. teaches:

the determining step determines the time for dividing the moving picture data based on the timing of controlling the camera toward a pre-set position (As the time for dividing the moving picture data is based on the detected type of camera motion, the dividing of the moving picture data is based on the timing of controlling the camera

toward a pre-set position, column 2, lines 25-30 and 50-52. For instance, if the camera movement changes from panning to a still or tilt position, the moving picture data is divided at this timing as the moving picture data is segmented and classified based on the type of camera motion.).

Consider claim 30, and as applied to claim 11 above, Girgensohn et al. teaches:

the information about the control of the camera is information relating to changing the direction of the camera ("pan, tilt, zoom", column 2, lines 25-30).

Consider claim 16, Girgensohn et al. teaches:

An apparatus for generating a plurality of moving picture files ("interactive video creation system", figure 1), comprising:

an obtaining device (See "detect camera on/off", 120, figure 1) for obtaining moving picture data taken by a camera (Recorded video (i.e. moving picture data) is obtained from a video camera, column 2, lines 15-18.), and information about a control of the camera which is taking the moving picture data (Information about the movement (i.e. control) of the camera is obtained through a motion detection algorithm, column 2, lines 25-49.);

a determining device (See "detect camera movement", 130, figure 1) for determining a time for dividing the moving picture data, for generating plural moving picture files based on the information about the control of the camera which is taking the moving picture data (A video take is divided into a plurality of segments or clips (i.e.

moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20.);

a dividing device (See "detect camera movement", 130, figure 1) for dividing the moving picture data at the time determined by the determining device and a generating device for generating a plurality of moving picture files, each including divided moving picture data divided by the dividing device (A video take is divided into a plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20.).

Consider claim 19, and as applied to claim 16 above, Girgensohn et al. teaches:

the information about the control of the camera is information indicating that one of pan, tilt, and zoom of the camera is being processed ("The classes of video detectable by the motion detection algorithm are still, pan, tilt, zoom, and garbage", column 2, lines 25-30.).

Consider claim 20, and as applied to claim 16 above, Girgensohn et al. teaches:

the information about the control of the camera is information relating to a change amount per unit time and wherein the determining device determines the time for dividing the moving picture data based on timing at which the change amount per unit time exceeds a predetermined change amount per unit time (The information about the control of the camera is camera motion information which is thus related to a

change amount per unit time. The moving picture data is divided into garbage clips during fast camera movement (i.e. based on timing at which the change amount per unit time exceeds a predetermined change amount per unit time), column 2, lines 41-42.).

Consider claim 21, Girgensohn et al. teaches:

A computer readable medium which stores a program for executing a method of generating a plurality of moving picture files (The invention is automatic (column 1, lines 52-63, involves the manipulation of digital data (column 2, lines 15-18) and involves a motion detection algorithm (column 2, lines 25-28). Therefore, the invention must include a program stored on a computer readable medium.), the method comprising:

obtaining moving picture data taken by a camera (Recorded video (i.e. moving picture data) is obtained from a video camera, column 2, lines 15-18.), and information about a control of the camera which is taking the moving picture data (Information about the movement (i.e. control) of the camera is obtained through a motion detection algorithm, column 2, lines 25-49.);

determining a time for dividing the moving picture data, for generating plural moving picture files based on the information about the control of the camera which is taking the moving picture data (A video take is divided into a plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20.);

dividing the moving picture data at the time determined at the determining step and generating a plurality of moving picture files, each including divided moving picture data divided at the dividing step (A video take is divided into a plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20.).

Consider claim 24, and as applied to claim 21 above, Girgensohn et al. teaches:

the information about the control of the camera is information indicating that one of pan, tilt, and zoom of the camera is being processed ("The classes of video detectable by the motion detection algorithm are still, pan, tilt, zoom, and garbage", column 2, lines 25-30.).

Consider claim 25, and as applied to claim 21 above, Girgensohn et al. teaches:

the information about the control of the camera is information relating to a change amount per unit time, and wherein the determining step determines the time for dividing the moving picture data based on timing at which the change amount per unit time exceeds a predetermined change amount per unit time (The information about the control of the camera is camera motion information which is thus related to a change amount per unit time. The moving picture data is divided into garbage clips during fast camera movement (i.e. based on timing at which the change amount per unit time exceeds a predetermined change amount per unit time), column 2, lines 41-42.).

Consider claim 29, and as applied to claim 21 above, Girgensohn et al. teaches:

the determining step determines the time for dividing the moving picture data based on the timing of controlling the camera toward a pre-set position (As the time for dividing the moving picture data is based on the detected type of camera motion, the dividing of the moving picture data is based on the timing of controlling the camera toward a pre-set position, column 2, lines 25-30 and 50-52. For instance, if the camera movement changes from panning to a still or tilt position, the moving picture data is divided at this timing as the moving picture data is segmented and classified based on the type of camera motion.).

Consider claim 31, and as applied to claim 21 above, Girgensohn et al. teaches:

the information about the control of the camera is information relating to changing the direction of the camera ("pan, tilt, zoom", column 2, lines 25-30).

Consider claim 26, Girgensohn et al. teaches:

A method of generating a plurality of moving picture files, the method comprising:

obtaining moving picture data taken by a camera (Recorded video (i.e. moving picture data) is obtained from a video camera, column 2, lines 15-18.), and information about an area which is prohibited from being displayed (An area of the video which contains fast or non-linear movement is classified as garbage and deleted (i.e.

prohibited from being displayed), column 2, lines 28-30 and lines 41-47, column 5, lines 6-7 and lines 13-14.);

determining a time for dividing the moving picture data, based on the information about the area which is prohibited from being displayed obtained at the obtaining step such that a first moving picture file based on a first moving picture data obtained in a period between a first time and a second time, a second moving picture file based on a second moving picture data obtained in a period between the second time and a third time, and a third moving picture file based on a third moving picture data obtained in a period between the third time and a fourth time are generated in a case where (a) the first moving picture data does not include the area which is prohibited from being displayed, (b) the second moving picture data includes the area which is prohibited from being displayed, and (c) the third moving picture data does not include the area which is prohibited from being displayed (A video take is divided into a plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20. If fast or nonlinear movement is detected, then that portion of the moving image data is divided into a garbage class, column 2, lines 41-42. The garbage clips are then deleted or discarded, column 2, lines 45-47, column 5, lines 13-14 and lines 48-52. Therefore, a first segment of the moving video not including fast or non-linear motion is divided into a first moving picture clip (i.e. file) not including an area prohibited from being displayed, a second subsequent segment of the moving video including fast or non-linear motion is divided into a second moving picture clip (i.e. file) including an area

prohibited from being displayed, and a third subsequent segment of the moving video not including fast or non-linear motion is divided into a third moving picture clip (i.e. file) not including an area prohibited from being displayed. Basically, anytime a segment of video including fast or non-linear movement is found between segments not including fast or non-linear movement, this will occur.); and

dividing the moving picture data at the time determined at the determining step (A video take is divided into a plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20.),

wherein the first, second, and third moving picture files are generated based on the moving picture data divided in the dividing step (The video take is divided into the plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20. Keyframes are then selected from the first and third files (i.e. clips having no prohibited area), column 3, lines 28-38. Garbage clips (i.e. the second clip including the prohibited area) are generated and discarded, column 5, lines 13-14 and lines 48-52, column 2, lines 41-47.).

Consider claim 27, Girgensohn et al. teaches:

A computer readable medium which stores a program for executing a method of generating a plurality of moving picture files (The invention is automatic (column 1, lines 52-63, involves the manipulation of digital data (column 2, lines 15-18) and involves a

motion detection algorithm (column 2, lines 25-28). Therefore, the invention must include a program stored on a computer readable medium.), the method comprising:

obtaining moving picture data taken by a camera (Recorded video (i.e. moving picture data) is obtained from a video camera, column 2, lines 15-18.), and information about an area which is prohibited from being displayed (An area of the video which contains fast or non-linear movement is classified as garbage and deleted (i.e. prohibited from being displayed), column 2, lines 28-30 and lines 41-47, column 5, lines 6-7 and lines 13-14.);

determining a time for dividing the moving picture data, based on the information about the area which is prohibited from being displayed obtained in the obtaining step such that a first moving picture file based on a first moving picture data obtained in a period between a first time and a second time, a second moving picture file based on a second moving picture data obtained in a period between the second time and a third time, and a third moving picture file based on a third moving picture data obtained in a period between the third time and a fourth time are generated in a case where (a) the first moving picture data does not include the area which is prohibited from being displayed, (b) the second moving picture data includes the area which is prohibited from being displayed, and (c) the third moving picture data does not include the area which is prohibited from being displayed (A video take is divided into a plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20. If fast or nonlinear movement is detected, then that portion of the moving image

data is divided into a garbage class, column 2, lines 41-42. The garbage clips are then deleted or discarded, column 2, lines 45-47, column 5, lines 13-14 and lines 48-52. Therefore, a first segment of the moving video not including fast or non-linear motion is divided into a first moving picture clip (i.e. file) not including an area prohibited from being displayed, a second subsequent segment of the moving video including fast or non-linear motion is divided into a second moving picture clip (i.e. file) including an area prohibited from being displayed, and a third subsequent segment of the moving video not including fast or non-linear motion is divided into a third moving picture clip (i.e. file) not including an area prohibited from being displayed. Basically, anytime a segment of video including fast or non-linear movement is found between segments not including fast or non-linear movement, this will occur.); and

generating the first, second, and third moving picture files based on the moving picture data having been divided as determined in the determining step (The video take is divided into the plurality of segments or clips (i.e. moving picture files) determined by the detected movement of the camera, column 2, lines 25-28 and lines 50-52, column 3, lines 12-19. See also column 5, lines 6-20. Keyframes are then selected from the first and third files (i.e. clips having no prohibited area), column 3, lines 28-38. Garbage clips (i.e. the second clip including the prohibited area) are generated and discarded, column 5, lines 13-14 and lines 48-52, column 2, lines 41-47.).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 13, 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girgensohn et al. in view of Colmenarez et al. (US 6,999,613).

Consider claims 13, 18 and 23, and as applied to claims 11, 16 and 21 above Girgensohn et al. does not explicitly teach that the information about the control of the camera is information relating to switching of the camera to another camera.

Colmenarez et al. similarly teaches using Hidden Markov Models to determine different states of an input video signal (column 1, lines 59-62, column 2, lines 3-10 and liens 36-40).

However, in addition to the teachings of Girgensohn et al., Colmenarez teaches that the input video signal is divided based upon information about the control of the

camera relating to switching of the camera to another camera (An asynchronous video multiplexer (120, figure 1) combines feeds obtained from multiple cameras (110), column 3, lines 18-29. Later, the video stream is demultiplexed to separate the individual camera feeds (column 3, line 64 through column 4, line 8). See figure 3, column 6, line 65 through column 7, line 12 and column 7, line 33 through column 8, line 33. Image matching is performed in step 320, whereby information about the switching of the cameras is obtained, and this information is used to determine which camera the image belongs to and separate the image data according to specific cameras in steps 335 and 345.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to have the information taught by Girgensohn et al. be information related to switching of the camera to another camera as taught by Colmenarez et al. for the benefit of applying a known technique to a known device ready for improvement to yield predictable results such as enabling the processing of asynchronous multiplexed video (Colmenarez et al., column 1, lines 48-53).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALBERT H. CUTLER whose telephone number is (571)270-1460. The examiner can normally be reached on Mon-Thu (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sinh Tran/
Supervisory Patent Examiner, Art Unit 2622

AC